

### **REMARKS**

The Office Action of May 13, 2009, has been considered by the Applicants. No claims are amended. New claim 25 is added. Claims 1, 2, and 21-25 are pending. Reconsideration of the Application is requested.

New independent claim 25 requires the particles to be anatase-type particles having peroxy groups. As noted in all of the references, anatase is expected to be photocatalytic. However, the claimed composite is not photocatalytic, and this is an unexpected result over the cited prior art.

Claims 1 and 2 were rejected under 35 U.S.C 102(b) as allegedly being anticipated by Ogata '463 (JP 2002-212463).

Claim 21 was rejected under 35 U.S.C 103(a) as allegedly being obvious over Ogata '463.

Claims 21-24 were rejected under 35 U.S.C 103(a) as allegedly being obvious over Ogata '463 in view of Elfenthal.

Claims 21-24 were rejected under 35 U.S.C 103(a) as allegedly being obvious over Ogata '463 in view of DE2545243.

Claims 2 and 24 were rejected under 35 U.S.C 103(a) as allegedly being obvious over Elfenthal in view of Ogata '463.

Claims 2 and 24 were rejected under 35 U.S.C 103(a) as allegedly being obvious over DE2545243 in view of Ogata '463.

All of these rejections use Ogata '463, and Applicants traverse these rejections together.

Ogata '463 is not available under 102(a) or 102(b). Ogata '463 is not available under 102(a) because the inventors of Ogata '463 are the same inventors as in this application, and thus Ogata '463 is not "by others" as required by 102(a). Ogata '463 is not available under 102(b) because this application has a priority date of November 7, 2002, which is less than one year after the publication date of July 31, 2002. These arguments were previously presented to the Examiner and accepted in the Office

Actions of January 28, 2008, and July 10, 2008. Because Ogata '463 is not available as a 102 reference, these 103(a) rejections also fail.

Applicants request withdrawal of the various 102/103 rejections using Ogata '463.

Claims 1 and 2 were rejected under 35 U.S.C 102(b) as allegedly being anticipated by Ogata '969 (US Patent No. 6,099,969). Applicants traverse the rejection.

Applicants submit that claims 1 and 2 are not anticipated by Ogata '969. In particular, the Examiner referred to the amorphous titanium peroxide as being non-photocatalytic. However, the claims refer to the overall titania-metal composite as being non-photocatalytic, not the titanium itself. In this respect, Ogata '969 does not teach that his coating agent is non-photocatalytic.

Applicants request withdrawal of the rejection.

Claim 21 was rejected under 35 U.S.C 103(a) as allegedly being obvious over Ogata '969. Applicants traverse the rejection.

According to the Examiner, it would have been obvious to adjust the ratio of additive to titanium oxide for the intended application of negated photocatalytic activity. This reasoning appears to be improper because Ogata '969 does not teach that the additive has anything to do with negating photocatalytic activity. Ogata '969 notes that amorphous titanium peroxide has no photocatalyst function, and that the conductive ceramic materials have an ultraviolet screening function and prevent the generation of static electricity. The Examiner's reasoning appears to be improper hindsight reasoning based on Applicants' disclosure, not that of Ogata '969.

Applicants request withdrawal of the 103(a) rejection.

Claims 1 and 21-23 were rejected under 35 U.S.C 102(b)/103(a) as allegedly being anticipated by or obvious over Elfenthal (US Patent No. 5,451,252). Applicants traverse the rejection.

Elfenthal discloses subpigmentary  $\text{TiO}_2$  comprising a crystalline lattice with dopant distributed throughout the lattice. This structure is different from the structures

disclosed and claimed herein, which do not take the form of a crystalline lattice. In addition, Elfenthal reduces his photoactivity using a different process. As described on page 15 of the present specification, the claimed composite is believed to stabilize the unstable active state caused by hydroxyl radicals or singlet oxygen atoms produced by exposure of oxygen or water to electromagnetic radiation.

Applicants request withdrawal of the 103(a) rejection.

Claims 1 and 21-23 were rejected under 35 U.S.C 102(b)/103(a) as allegedly being anticipated by or obvious over DE2545243. Applicants traverse the rejection.

DE2545243 discloses  $\text{TiO}_2$  which is calcined with a compound containing ions. Again, this structure is different from the claimed structure, which is simply a mixture of titanium peroxide particles with the metals.

Applicants request withdrawal of the 103(a) rejection.

**CONCLUSION**

For the above reasons, all pending claims (1, 2, and 21-25) are in condition for allowance. Withdrawal of the rejections and issuance of a Notice of Allowance is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is hereby authorized to call Jay F. Moldovanyi, at telephone number 216-363-9000, Cleveland, OH.

It is believed that no fee is due in conjunction with this response. If, however, it is determined that fees are due, authorization is hereby given for deduction of those fees, other than the issue fees, from Deposit Account No. 06-0308.

Respectfully submitted,

FAY SHARPE LLP

5 Nov 09  
Date

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I hereby certify that this correspondence (and any item referred to herein as being attached or enclosed) is (are) being	
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<input checked="" type="checkbox"/>	transmitted to the USPTO by electronic transmission via EFS-Web on the date indicated below.
	Signature: <u>Kathleen A. Nimrichter</u>
Date: <u>November 5, 2009</u>	Name: <u>KATHLEEN A. NIMRICHTER</u>

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